

Iowa Crops & Weather



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DECEMBER MARKED BY DRY AND MILD WEATHER

Mild and dry were two recurring themes for the weather during the month of December. The lack of precipitation has reduced soil moisture availability to 58 percent of the state being short to very short on soil moisture. Aided by the dry weather, farmers have been able to continue field work and perform fall tillage and fertilizer application. Fertilizer application ranks above both last year's application percent and the five year average (see graph below). Those cattle feeding on corn stalks remain on the stalks due to the favorable weather.

At the end of December, the average depth of **snow cover** across Iowa was visibly zero inches, compared to 5 inches at the same time last year. The average depth of **frost penetration** for the state was 5 inches, compared to last year's 8 inches. **Soil moisture availability** was rated 20 percent very short, 38 percent short, 41 percent adequate, and 1 percent surplus. **Movement of grain** for the state was 25 percent none, 46 percent light, 27 percent moderate, and 2 percent heavy.

Availability of hay and roughage supplies was 5 percent short, 81 percent adequate, and 14 percent surplus. **Quality of hay and roughage supplies** was 6 percent poor, 41 percent fair, and 53 percent good. **Utilization of stubble fields for grazing** rated 32 percent none, 22 percent limited, 29 percent moderate, and 17 percent extensive.

Hog and pig losses in December were below last year's state averages at 32 percent below average, 65 percent average, and 3 percent above average. **Cattle and calf losses** were also below last year's state averages at 42 percent below average, 57 percent average, and 1 percent above average. While the mild weather has reduced stress on livestock, there were scattered reports of flu in livestock and Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) in hogs and pigs.

IOWA PRELIMINARY MONTHLY WEATHER SUMMARY – DECEMBER 2002

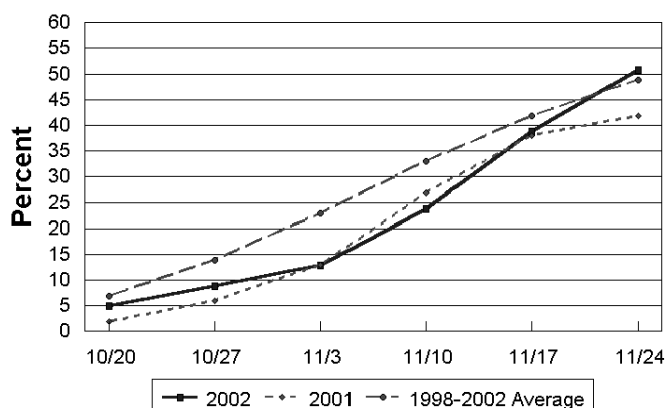
General Summary: December temperatures averaged 29.2 degrees or 6.3 degrees above normal while precipitation totaled 0.22 inch or 1.05 inches less than normal. This ranks as the driest and 22nd warmest December among 130 years of state records. The previous record dry December was recorded in 1876 when 0.24 inch of precipitation fell.

Temperatures: The cold weather pattern of October and November continued into early December with below normal temperatures recorded on 6 of the first 8 days of the month. The first subzero temperatures of the season were recorded late on the 4th in northwest Iowa with readings eventually falling to -8 degrees at Sibley and Spencer on the morning of the 5th. However, above normal temperatures prevailed on all but one (the 24th) of the remaining 23 days of the month. Temperatures averaged 10 or more degrees above normal from the 12th through the 19th and again from the 27th through the 30th. The month's highest temperatures were reported on the 15th with readings of 65 degrees at Clarinda, Corning, and Shenandoah.

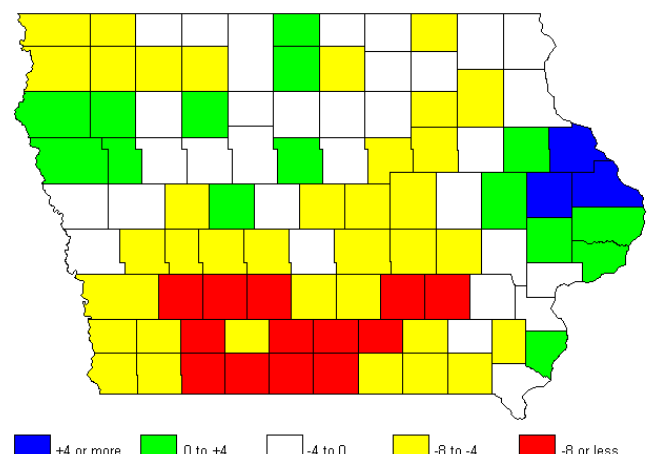
Heating Degree Days: Home heating requirements, as estimated by heating degree day totals, averaged 4 percent greater than last December but were 16 percent less than normal. Thus far this season (Jul. 1 – Dec. 31) heating requirements are averaging exactly normal for this time of year but are 24 percent greater than at this point last season.

Precipitation: The very dry weather pattern that began in November persisted through all of December as well. No measurable precipitation (0.01 inch or more) has been recorded at either Des Moines or Jefferson since November 11. At Des Moines, this 50 day period broke the previous record of 45 consecutive days without measurable precipitation set in the fall of 1952. Des Moines' December precipitation total of a trace was also a record low total for any month since records began in 1878 (previous record 0.03 inch in Oct. 1952 and Nov. 1969). There were numerous other locations in central and southwest Iowa reporting only traces of precipitation this month. Almost all of December's precipitation fell between the evening of the 17th and afternoon of the 18th when thunderstorms rumbled across the state. A few eastern Iowa locations received over an inch of rain with these storms, with the greatest amount of 2.13 inches reported at De Witt. An additional 0.04 inch of precipitation fell at De Witt on the 2nd to give them a December total of 2.17 inches. This makes De Witt the only site in the state to report greater than normal precipitation during the month. Light snow (two inches or less) fell across the northwest one-quarter on the 4th while extreme eastern Iowa saw some very light accumulations on the 2nd and 20th. The statewide average snowfall was only 0.4 inch which ties with 1979 as the lowest December snowfall total among 116 years of Iowa snow records.

Iowa Fall Fertilizer Applied



Preliminary County Precipitation, Departure From Normal, 2002 (inches)



December Weather Summary For Iowa Agricultural Statistics Service
Prepared By AWIS, Inc.

For the Period: Sunday December 1, 2002
To: Tuesday December 31, 2002

STATION	AIR							HDD TOT	HDD DFN	DAYS COLD	DAYS OF 32 COLD
	TEMPERATURE				PRECIPITATION						
	HI	LO	AVG	DFN	TOTAL	DFN	DAYS				
North West District											
Estherville_AP	56	-5	27	+10	0.10	-0.63	3	1171	-297	31	28
Sioux_Center	58	-8	28	+9	0.11	-0.73	3	1131	-261	30	27
Spencer_AP	58	-8	26	+9	0.06	-0.65	1	1186	-256	31	27
Spirit_Lake	55	-2	27	+11	0.10	-0.79	2	1166	-54	31	27
North Central District											
Britt	53	-4	25	+7	0.14	-1.22	3	1220	-194	31	28
Humboldt_Wa_Plt	55	0	27	+7	0.00	-1.01	0	1174	-224	31	27
Mason_City_AP	52	-2	27	+9	0.48	-0.73	3	1163	-283	29	26
Northwood	52	-2	25	+8	0.47	-0.67	3	1237	-242	30	28
North East District											
Decorah	53	0	28	+8	0.24	-0.97	1	1151	-221	29	27
Dubuque_AP	53	2	28	+7	0.71	-1.25	4	1129	-218	29	24
Elkader	57	-1	27	+5	0.31	-1.09	3	1185	+2	31	28
Independence	56	1	27	+8	0.23	-1.30	4	1168	-114	31	29
Waterloo_Munici	57	1	30	+11	0.12	-1.18	2	1063	-323	27	25
West Central District											
Audubon_Ag	61	3	28	+5	0.00	-1.19	0	1143	-142	31	28
Carroll_Ag	60	5	29	+9	0.07	-0.89	2	1112	-246	31	26
Castana_Exprmnt	62	3	29	+7	0.05	-0.78	1	1106	-287	31	24
Guthrie_Center	64	2	29	+7	0.00	-1.28	0	1118	-196	31	29
Harlan	61	2	29	+6	0.01	-1.00	1	1106	-264	30	28
Jefferson	62	8	30	+9	0.00	-0.96	0	1083	-275	31	27
Logan	61	6	29	+7	0.01	-1.06	1	1104	-209	30	29
Rockwell_City	57	4	28	+7	0.00	-0.93	0	1143	-193	31	30
Sioux_City_AP	60	0	29	+8	0.07	-0.71	1	1098	-241	29	26
Central District											
Ames_Muni_Arpt	57	2	29	+9	0.00	-1.11	0	1100	-259	30	26
Boone_Ag	57	8	29	+8	0.00	-1.34	0	1100	-244	30	26
Des_Moines	59	9	32	+8	0.00	-1.32	0	1018	-242	27	21
Eldora	55	3	28	+8	0.81	-0.34	1	1140	-232	31	29
Marshalltown_AP	56	1	29	+8	0.20	-1.09	1	1103	-230	30	25
Newton	59	6	29	+6	0.17	-0.96	2	1108	-185	31	27
Perry	61	5	29	+8	0.02	-1.04	2	1110	-215	31	27
Toledo	58	3	28	+7	0.05	-1.20	2	1144	-194	31	29
East Central District											
Cedar_Rapids_Mu	57	5	30	+8	0.27	-1.32	2	1079	-231	30	23
Davenport	58	7	30	+5	1.21	-0.71	2	1065	-155	27	22
Iowa_City_AP	57	4	31	+5	0.56	-1.00	2	1053	-159	28	25
Lowden	56	1	28	+6	0.94	-1.17	4	1138	-162	31	28
Maquoketa	55	3	27	+5	0.75	-1.05	3	1162	-143	31	29
Muscatine_2N	58	10	31	+5	0.90	-1.07	2	1053	-337	29	23
South West District											
Clarinda	65	4	29	+6	0.00	-1.18	0	1095	-157	30	29
Glenwood	63	6	31	+8	0.00	-1.18	0	1034	-200	31	27
Oakland	61	7	31	+9	0.00	-1.07	0	1058	-253	29	26
Red_Oak	64	7	31	+6	0.00	-1.21	0	1044	-179	28	27
Sidney	64	9	33	+8	0.02	-1.14	1	987	-238	27	23
South Central District											
Allerton	61	8	30	+6	0.13	-1.18	3	1074	-406	30	28
Beaconsfield	61	8	31	+7	0.00	-1.11	0	1057	-195	29	27
Chariton	62	5	30	+7	0.04	-1.32	2	1072	-193	29	26
Indianola	63	6	31	+7	0.13	-1.25	1	1052	-211	29	28
Leon	61	4	31	+7	0.10	-1.26	1	1054	-195	28	26
South East District											
Bloomfield	62	9	31	+5	0.10	-1.46	2	1031	-136	30	23
Burlington_Muni	62	10	33	+7	0.79	-1.19	2	982	-204	25	19
Ottumwa	64	8	32	+7	0.07	-1.36	5	1012	-203	28	24

Precipitation (rain or melted snow/ice) in inches.
Precipitation Days = Days with precip of 0.01 inch or more.
Air Temperatures in Degrees Fahrenheit.

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